CONTENTS-1978, Nos. 1-4

Adest, Gary (see Bellemin, Jeanne)
ALEKSIUK, MICHAEL (see Bellemin, Jeanne)
ALLEN, DONALD M. Body size and porphyropsin visual pigment in a cyprinid1
ALLEN, GERALD R., MARIE-LOUISE BAUCHOT AND MARTINE DESOUTTER. The status of Abudef- duf sexfasciatus (Lacépède), a pomacentrid fish from the Indo-West Pacific
Andrén, C. (see Nilson, G.)
ANDRIASHEV, A. P., AND DON E. McAllister. Status of the presumed zoarcid fish Ophidium
parrii and its identity with Libaris koefoedi Liparidae
ATKINSON, EDUARDO, AND FRANK W. JUDD. Comparative hematology of Lepomis micro-
tophus and Cichiasoma cyanoguttatum
AWBREY, FRANK T. Social interaction among chorusing Pacific tree frogs, Hyla regilla . 2
BACHMANN, K., AND M. NISHIOKA. Genome size and nuclear size in Palaearctic frogs (Rana)
BAKER-DITTUS, ANNE M. Foraging patterns of three sympatric killifish
BAKRADZE, M. A. (see Darevsky, I. S.)
BALL, KENT W. (see Wallace, Richard L.) BARNARD, SUSAN M. (see Van Microp, L. H. S.)
BAUCHOT, MARIE-LOUISE (see Allen, Gerald R.)
BECHTEL, ELIZABETH (see Bechtel, H. Bernard)
BECHTEL, H. BERNARD, and ELIZABETH BECHTEL. Heredity of pattern mutation in the corn
snake, Elaphe g. guttata, demonstrated in captive breedings
BECK, Andrew P. (see Rachlin, Joseph W.)
BELLEMIN, JEANNE, GARY ADEST, GEORGE C. GORMAN AND MICHAEL ALEKSIUK. Genetic
uniformity in northern populations of <i>Thannophis sirtalis</i> (Serpentes: Colubridae)
BIRD, PATRICIA M. Tissue regeneration in three carcharhinid sharks encircled by embedded straps
BISHOP, JAMES M., AND JOHN V. MIGLARESE. Carnivorous feeding in adult striped mullet
BLACK, ANN, AND W. MIKE HOWELL. A distinctive chromosomal race of the cyprinodontid
fish, Fundulus notatus, from the upper Tombigbee River system of Alabama and Missi-
sippi
Briggs, Thomas (see Bussjaeger, Carolee)
Brindley, Darlene C. (see Cannon, M. S.)
Brodie, Jr., Edmund D. Biting and vocalization as antipredator mechanisms in terrestrial
salamanders
BRODIE, JR., EDMUND D. (see Nowak, Robert T.)
BRUCE, RICHARD C. Reproductive biology of the salamander <i>Pseudotriton ruber</i> in the southern Blue Ridge Mountains
Burgess, Warren E. (see Powles, Howard)
BURR, BROOKS M. (see Buth, Donald G.)
BUSSJAEGER, CAROLEE, AND THOMAS BRIGGS. Phylogenetic implications of bile salts in some
catostomid fishes
BUTH, DONALD G., AND BROOKS M. BURR. Isozyme variability in the cyprinid genus
Campostoma
CANNON, M. S., MANLEY McGILL AND DARLENE C. BRINDLEY. The ultrastructural localiza-
tion of glucose-6-phosphatase in the parotoid gland of Bufo alvarius
CARROLL, THOMAS E., AND DAVID W. EHRENFELD. Intermediate-range homing in the wood
turtle, Clemmys insculpta
CASE, SUSAN M. Electrophoretic variation in two species of ranid frogs, Rana boylei and
R. muscosa Carreer Program W. Damalichthus savatogenesis: a new freshwater fish (Embiotocidae)
Casteel, Richard W. Damalichthys saratogenesis: a new freshwater fish (Embiotocidae) from the Plio-Pleistocene (Blancan) of California
CASTLE, P. H. J. Ovigerous leptocephali of the nettastomatid cel genus Facciolella
CHAPMAN, ROBERT W. Observations of spawning behavior in Atlantic spadefish, Chaeto-
dipterus faber
CLOUTMAN, DONALD G. (see Harrell, Raymond D.)
COAD, BRIAN W., AND S. U. QADRI. Status of the generic name Endemichthys (Os-
teichthyes)
CONGDON, JUSTIN D., WILLIAM W. KING AND KENNETH A. NAGY. Validation of the HTO-18
method for determination of CO ₂ production of lizards (genus Sceloporus)
COSENTINO, KATHY (see Werner, Henry James)
CRUMP, MARTHA L. (see Kaplan, Robert H.)
CURD, MILTON R. (see Grizzle, John M.)
CYRUS, RODNEY V., I. Y. MAHMOUD AND JOHN KLICKA. Fine structure of the corpus luteum
of the snapping turtle, Chelydra serpentina
DANIELS, ROBERT A., AND PETER B. MOYLE. Biology, distribution and status of Cottus
asperrimus in the Pit River drainage, northeastern California
DAREVSKY, I. S., L. A. KUPRIYANOVA AND M. A. BAKRADZE. Occasional males and intersexes
in parthenogenetic species of Caucasian rock lizards (genus Lacerta)

DAVITZ, MICHAEL A., AND KENNETH R. McKAYE. Discrimination between horizontally and vertically polarized light by the cichlid fish Pseudotropheus macrophthalmus	333
Dawson, C. E. Micrognathus vitiatus (Kaup), a junior synonym of M. crinitus (Jenyns), with description of the insular pipefish, M. tectus, new sp.	13
DAWSON, C. E. Syngnathus parvicarinatus, a new Australian pipefish, with notes on S.	288
	537
Dobie, James L. A fossil amniote egg from an upper Cretaceous deposit (Mooreville chalk	460
Dodson, Peter (see Terpin, Kenneth M.)	100
DUELLMAN, WILLIAM E. (see Trueb, Linda) ECHELLE, ALIGE F., ANTHONY A. ECHELLE AND HENRY S. FITCH. Inter- and intraspecific allometry in a display organ: The dewlap of Anolis (Iguanidae) species	245
ECHELLE, ANTHONY A., AND ALICE F. ECHELLE. The Pecos River pupfish, Cyprinodon pecosensis n. sp. (Cyprinodontidae), with comments on its evolutionary origin	569
EHRENFELD, DAVID W. (see Carroll, Thomas E.)	
	714
ESCH, GERALD W. (see Quinn, Thomas) FELLEY, JAMES D., AND MICHAEL H. SMITH. Phenotypic and genetic trends in bluegills of a single drainage	175
FIERSTINE, HARRY L. A new marlin, Makaira panamensis, from the late Miocene of Panama	1
FITCH, HENRY S. (see Echelle, Alice F.) FLETEMEYER, JOHN R. Underwater tracking evidence of neonate loggerhead sea turtles	1.40
FOLEY, ROBERT E., AND JAMES R. SPOTILA. Effect of wind speed, air temperature, body size and vapor density difference on evaporative water loss from the turtle <i>Chrysemys</i>	148 627
FOUQUETTE, JR., M. J. (see Mitchell, Joseph C.)	041
GARDNER, ALFRED L. (see Rhodin, Anders G. J.) GIBBONS, I. WHITFIELD (see Ouinn, Thomas) (see Semlitsch, Raymond D.)	
GOLDBERG, STEPHEN R. Reproductive cycle of the white seaperch, Phanerodon furcatus	177 334
GORMAN, GEORGE C. (see Bellemin, Jeanne)	001
	364
GRIZZLE, JOHN M., AND MILTON R. CURD. Posthatching histological development of the	263 448
Grobecker, David B. A new species of anglerfish, genus Oneirodes (Oneirodidae), from	567
GROBECKER, DAVID B., AND THEODORE W. PIETSCH. Second specimen of the rare deep-sea	547
GRONELL, ANN M. (see Thresher, Ronald E.) GUEST, W. CLELL, AND JAMES L. LASSWELL. A note on courtship behavior and sound pro-	
	337
plain pond	358
	60 443
HARRIS, JOHN L. (see Robison, Henry W.) HAZEN, TERRY C. (see Quinn, Thomas)	
HEATWOLE, HAROLD (see Witten, Geoffrey J.)	104
Hicks, Donald C. A population of albino black bullheads, <i>Ictalurus melas</i> Hightower, James A. The cell cycle of the neutrophilic granulocyte in a urodele amphibian	184 86
HILLMAN, PETER E. (see Pough, F. Harvey) HOWELL, W. MIKE (see Black, Ann)	
HUBBS, CARL L., AND ROBERT RUSH MILLER. Notropis panarcys, n. sp., and N. proserpinus, cyprinid fishes of subgenus Cyprinella, each inhabiting a discrete section of the Rio	582
HUBBS, CLARK (see Thompson, Kenneth W.)	
HUEY, RAYMOND B. (see Pianka, Eric R.) HUTCHISON, VICTOR H. (see Graham, Terry E.)	

Iskan in Iverso sou JAEGE pre JOHNS pai JONES JUDD, KAPL opa KARP mo KELL KING, KINGS Me KLICE KNEI KORK in KRAN in KRAT gra KUPR KYNA LARSO LASSY LEGL LEWI in LIAT LOVE tyr atr Lyno (Lo MAC MAH

MAIO MAP MAR Pa off MAR MGA MCC MCE

MCC Cin MCC MCK MCK MEA MED MED

MIGI MIN MISI Ei MIT Ci MIT

ISKANDAR, DJOKO T. A new species of Barbourula: First record of a discoglossid anuran	rc4
IVERSON. JOHN B. Distributional problems of the genus Kinosternon in the American	564 476
JAEGER, ROBERT G. Plant climbing by salamanders: Periodic availability of plant-dwelling	686
JOHNSON, RICHARD H., AND DONALD R. NELSON. Copulation and possible olfaction-mediated	539
KARPLUS, ILAN. A feeding association between the grouper Epinephelus fasciatus and the	164
King, William W. (see Congdon, Justin D.) Kingston, Dolores Irene. Skiffia francesae, a new species of goodeid fish from western Mexico	503
KLICKA, JOHN (see Cyrus, Rodney V.) KNEIB, R. T. Habitat, diet, reproduction and growth of the spotfin killifish, Fundulus luciae, from a North Carolina salt marsh KORKY, JOHN K. Differentiation of the larvae of members of the Rana pipiens complex	164
	455
in Panama Kratt, L. F., And R. J. F. Smith. Breeding tubercles occur on male and female arctic grayling (<i>Thymallus arcticus</i>)	536 185
	702
LARSON, RALPH J. (see Love, Milton S.) LASSWELL, JAMES L. (see Guest, W. Clell) LEGLER, JOHN M. (see Eisner, Thomas)	
Lewis, Michael A. Notes on the natural history of the longfin dace, Agosia chrysogaster, in a desert rheocrene	703
LIAT, LIM Boo (see Voris, Harold K.) LOVE, MILTON S., AND RALPH J. LARSON. Geographic variation in the occurrence of tympanic spines and possible genetic differentiation in the kelp rockfish (Sebastes atrovirens)	53
Lynch, John D. A new eleutherodactyline frog from the Andes of northern Colombia (Leptodactylidae)	17
MACAVOY, E. S. (see Pollock, M.)	
MAHMOUD, I. Y. (see Cyrus, Rodney V.) MAIORANA, VIRGINIA C. Behavior of an unobservable species: Diet selection by a salamander	664
MAPLE, WILLIAM T. (see Orr, Lowell P.) MARKLE, DOUGLAS F., AND GEORGE R. SEDBERRY. A second specimen of the deep-sea fish, Pachycara obesa, with a discussion of its classification and a checklist of other Zoarcidae off Virginia	25
MARTHI, CHESTER O. (see MacEachran, John D.) MCALLISTER, DON E. (see Andriashev, A. P.)	det
McCosker, John E. Synonymy and distribution of Calloplesiops (Pisces: Plesiopidae)	707 595
(Pisces: Rajidae) McGavin, Maureen. Recognition of conspecific odors by the salamander <i>Plethodon cinereus</i>	356
McGill, Manley (see Cannon, M. S.) McKaye, Kenneth R. (see Davitz, Michael A.)	
MEAD, JIM I. (see Van Devender, Thomas R.)	
MEDEM, FEDERICO (see Rhodin, Anders G. J.)	
MEINWALD, JERROLD (see Eisner, Thomas)	
MIGLARESE, JOHN V. (see Bishop, James M.)	
MILLER, ROBERT RUSH (see Hubbs, Carl L.) MINTON, JR., SHERMAN A. Serological relationships of some Philippine sea snakes	15
MISITANO, DAVID A. Description of laboratory-reared larvae of the buffalo sculpin,	
Enophrys bison (Pisces: Cottidae) MITCHELL, JOSEPH C., AND M. J. FOUQUETTE, JR. A gynandromorphic whiptail lizard, Chemidophorus incompate from Avisona	653
Cnemidophorus inornatus, from Arizona	a U

Mok, Hin-Kiu. Scale-feeding in Tydemania navigatoris (Pisces: Triacanthodidae)
strategy of a Boa constrictor 532 Moore, Frank L. Effects of progesterone on sexual attractivity in female rough-skinned newts, Taricha granulosa 530
MOORE, ROBERT GUY. Seasonal and daily activity patterns and thermoregulation in the southwestern speckled rattlesnake (Crotalus mitchelli pyrrhus) and the Colorado desert
sidewinder (Crotalus cerastes laterorepens) 439 Мокағка, David J. (see Pough, F. Harvey)
MOYLE, PETER B. (see Daniels, Robert A.) NAFPAKTITIS, BASIL G., AND JOHN R. PAXTON. Idiolychnus, a new genus of Myctophidae based on Diaphus urolampus 492
NAGY, KENNETH A. (see Congdon, Justin D.) NAKAMURA, IZUMI, AND SHEJI NAKANO. Dispersal of the shortbill spearfish, Tetrapturus angustirostris, to the Atlantic Ocean 330 NAKANO, SHEJI (see Nakamura, Izumi)
Nelson, Donald R. (see Johnson, Richard H.) Nilson, G., and C. Andren. A new species of Ophiomorus (Sauria: Scincidae) from Kavir Desert, Iran 559
NISHIOKA, M. (see Bachmann, K.) NOWAK, ROBERT T., AND EDMUND D. BRODIE, JR. Rib penetration and associated anti-
predator adaptations in the salamander <i>Pleurodeles waltl</i> (Salamandridae)
ORR, LOWELL P., AND WILLIAM T. MAPLE. Competition avoidance mechanisms in salamander larvae of the genus Desmognathus679
Oscood, Donald William. Effects of temperature on the development of meristic char-
acters in Natrix fasciata Otto, Robert G. (see Sidell, Bruce D.)
Page, Lawrence M. Redescription, distribution, variation and life history notes on <i>Percina macrocephala</i> (Percidae)655
Page, Lawrence M., and Douglas W. Schemske. The effect of interspecific competition on the distribution and size of darters of the subgenus Catonotus (Percidae: Etheostoma) 406
PAINE, R. T., AND A. R. PALMER. Sicyases sanguineus: A unique trophic generalist from the Chilean intertidal zone
PALMER, A. R. (see Paine, R. T.) PATTERSON, KAREN K. Life history aspects of paedogenic populations of the mole salamander, Ambystoma talpoideum 649.
Paulson, Alan C. On the commensal habits of Pterelectris, Acanthurus and Zebrasoma with fossorial Valenciennea and Amblygobius
PAXTON, JOHN R. (see Nafpaktitis, Basil G.) PIANKA, ERIC R., AND RAYMOND B. HUEY. Comparative ecology, resource utilization and
niche segregation among gekkonid lizards in the southern Kalahari 69 PIAVIS, GEORGE W., AND MICHAEL G. PIAVIS. Implantation of an abdominal window in the sea lamprey, Petromyzon marinus (Pisces: Petromyzontidae) 349
PIAVIS, MICHAEL G. (see Piavis, George W.) PIETSCH, THEODORE W. The feeding mechanism of Stylephorus chordatus (Teleostei:
Lampridiformes): Functional and ecological implications 25: PIETSCH, THEODORE W. Evolutionary relationships of the sea moths (Teleostei: Pegasidae)
with a classification of gasterosteiform families 51
PIETSCH, THEODORE W. (see Grobecker, David B.) (see Seigel, Jeffrey A.) POLLOCK, M., AND E. S. MACAVOV. Morphological and metabolic changes in muscles of
hibernating lizards 41. POUGH, F. HARVEY. Ontogenetic changes in endurance in water snakes (Natrix sipedon):
Physiological correlates and ecological consequences 6 Pough, F. Harvey, David J. Morafka and Peter E. Hillman. The ecology and burrowing
behavior of the Chihuahuan fringe-footed lizard, <i>Uma exsul</i> 8 POWDERS, VERNON N. Observations on oviposition and natural incubation of eggs of the
alligator snapping turtle, Macroelemys temmincki, in Georgia
POWLES, HOWARD, AND WARREN E. BURGESS. Observations on benthic larvae of Pareques (Pisces: Sciaenidae) from Florida and Colombia
PUTNAM, J. L., AND D. L. KELLY. A new interpretation of interatrial septation in the lung- less salamander, Plethodon glutinosus25
QADRI, S. V. (see Coad, Brian W.)
QUINN, THOMAS, GERALD W. ESCH, TERRY C. HAZEN AND J. WHITFIELD GIBBONS. Long range movement and homing by largemouth bass (<i>Micropterus salmoides</i>) in a thermally altered reservoir
RACHLIN, JOSEPH W., ANDREW P. BECK AND JOSEPH M. O'CONNOR. Karyotypic analysis of the Hudson River striped bass, Morone saxatilis34
RADTKE, RICHARD L. Aberrant sagittae from larval striped bass, Morone saxatilis
RAND, A. STANLEY (see Montgomery, G. Gene)

RASCHI

two REED, RHODE Kary Robisc Note Ross, Ross, corp Ross, Gua RUBY, Scele RUSSEI pho RUTHI SAVAGI west SCHAL Two SCHEM SCHOE SCHOE in s SEDBER SEIGEL atic SEIGEL gen SEMLI wat SHAFF tida SHELT Clu SIDELI tino SMITH SMITH SPOTI STANC on STARN STARN to STEAR tric STEIN STEIN STICK TALB TERP hyo THON THOM mo THRE TRUE fro TRUE ULTS wa VAGV VAGV VAN ph VAN the Vori a

two similar spe-	Notes on the gross functional morphology of the ampullary system in cies of skates, Raja erinacea and R. ocellataee Ross, Michael R.)
RHODIN, ANDERS C	G. J., RUSSELL A. MITTERMEIER, ALFRED L. GARDNER AND FEDERICO MEDEM.
ROBISON, HENRY	ysis of the <i>Podocnemis</i> turtles W., AND JOHN L. HARRIS. Notes on the habitat and zoogeography of (Pisces: Ictaluridae)
Ross, J. P. (see S	
corporalis Ross, Robert M.	Reproductive behavior of the anemonefish Amphiprion melanopus on
	E. Seasonal changes in the territorial behavior of the iguanid lizard
Sceloporus jarro Russell, Anthony	ver P. The status of the lizard genera <i>Blaesodactylus</i> Boettger and <i>Homo-</i> er (Reptilia: Gekkonidae)
RUTHERFORD, KIM	(see Werner, Henry James) AND JAMES J. TALBOT. The giant anoline lizards of Costa Rica and
Schall, Joseph J. Two parthenog	Reproductive strategies in sympatric whiptail lizards (Cnemidophorus): enetic and three bisexual species
SCHOENER, AMY (AS W. (see Page, Lawrence M.) see Schoener, Thomas W.)
in some Anolis	
SEIGEL, JEFFREY A atics, ecology	R. (see Markle, Douglas F.) LAN. Revision of the dalatiid shark genus Squaliolus: Anatomy, system-
Seigel, Jeffrey A genus Oneirode	a., AND THEODORE W. PIETSCH. A new species of the ceratioid anglerfish (Pisces: Lophiiformes) from the Indo-West Pacific
water snake, N	DND D., AND J. WHITFIELD GIBBONS. Reproductive allocation in the brown atrix taxispilota DLEV. Relative predation pressure on salamanders (Caudata: Plethodon-
tidae) along an	altitudinal transect in Guatemala L. Fate of the follicular epithelium in Dorosoma petenense (Pisces:
Clupeidae) Sidell, Bruce D., tinction of strip	ROBERT G. OTTO AND DENNIS A. POWERS. A biochemical method for dis- sed bass and white perch larvae
SPOTILA, JAMES R	H. (see Felley, James D.) see Kratt, L. F.) . (see Foley, Robert E.) (see Terpin, Kenneth M.) S.D. I. P. Ross. An analysis of sand from green turtle pesting beaches
on Ascension Is	and J. P. Ross. An analysis of sand from green turtle nesting beaches sland
STARNES, WAYNE	C., AND LYNN B. STARRES. A new cyprinid of the genus <i>Phoxinus</i> endemic Cumberland River drainage
STEARNS, S. C.	Interpopulational differences in reproductive traits of <i>Neoheterandria</i> ces: Poeciliidae) in Panama
STEIN, DAVID L. STEINWASCHER, KU STICKEL, LUCILLE	Liparoides beauchampi not a cyclopterid but probably a cottid
TERPIN, KENNETH hydrochloride	(see Savage, Jay M.) i M., Peter Dodson and James R. Spotila. Observations on ketamine as an anaesthetic for alligators
THOMPSON, KENN	o (see Werner, Henry James) ETH W., Clark Hubbs and Robert J. Edwards. Comparative chromosome the blackbasses
THRESHER, RONAL TRUEB, LINDA, AN	D. E., AND ANN M. GRONELL. Subcutaneous tagging of small reef fishes D. WILLIAM E., DUELLMAN. An extraordinary new casque-headed marsupia Gastrotheca)
	k M. (see Fruge, Douglas J.) R. Oxygen consumption as a function of pH in three species of fresh
VAGVOLGYI, JOSEP VAN DEVENDER, 7	E. (see Vagvolgyi, Joseph) H, AND ALICE E. VAGVOLGYI. Feedling habits of the Galápagos land iguan: THOMAS R., AND JIM I. MEAD. Early Holocene and late Pleistocene am eptiles in Sonoran desert packrat middens
VAN MIEROP, L. I	epries in Soloran desert packet inductis I. S., AND SUSAN M. BARNARD. Further observations on thermoregulation in emale <i>Python molurus bivittatus</i> (Serpentes: Boidae)
VORIS, HAROLD K	., HELEN H. VORIS AND LIM BOO LIAT. The food and feeding behavior o
a marine snake	c, zamijuma otmorom (xi)mopimum)

VORIS, HELEN H. (see Voris, Harold K.) WALLACE, RICHARD L., AND KENT W. BALL. Landlocked parasitic Pacific lamprey in Dworshak reservoir, Idaho
Weber, Ernst. Distress calls of Bufo calamita and B. viridis (Amphibia: Anura)
Werner, Henry James, Kim Rutherford, Richard Thomas and Kathy Cosentino. Light and electron microscope aspects of the epithelium of the small intestine of the snake, Typhlops pusilla 71
WHETSTONE, KENNETH N. Additional record of the fossil snapping turtle Macroclemys schmidti from the Marsland formation (Miocene) of Nebraska with notes on interspecific skull variation within the genus Macroclemys
WISEMAN, E. DAVID, ANTHONY A. ECHELLE AND ALICE F. ECHELLE. Electrophoretic evidence for subspecific differentiation and intergradation in <i>Etheostoma spectabile</i> (Teleostei: Percidae)
WITTEN, GEOFFREY J., AND HAROLD HEATWOLE. Preferred temperature of the agamid lizard Amphibolurus nobbi nobbi